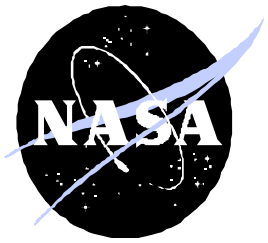
CI-1-9905 Version 1
7/30/99

HQ INFORMATION TECHNOLOGY
WORK CONTROL POLICY AND PROCEDURES

CI-1-9905



National Aeronautics and
Space Administration

Version 1
July 30, 1999

Headquarters
Washington, D.C.

1.0 INTRODUCTION

1.1 Identification

This document describes the policy and procedures to be followed by the Headquarters Information Technology & Communications Division (Code CI) and its support contractors, in performing work for NASA Headquarters' customers.

1.2 Purpose

The purpose of this policy and procedure is to establish a work control process for Code CI and its contractors to schedule, track, implement, escalate, expedite and prioritize all categories of customer work in order to ensure that Code CI and its contractors are responsive to customer requirements.

1.3 Scope

This policy and procedure applies to Information Technology (IT) work functions performed and services provided by Code CI and its contractors on behalf of their customers. This applies to Problem Reports (PR), Consultations, and Service Requests (SR) as they support the consolidated Headquarters Automatic Data Processing/Telecommunications (ADP/T) environment. The procedure also implements the policy on work control approved by the ADP/T Board of Directors on October 25, 1994.

The work performed under this procedure by each contractor to Code CI will be as specified within the Statement of Work (SOW) of the contract agreement.

This policy and procedure does not apply to the Correspondence Management, Mail Center, and InfoCom functions of Code CI. These functions have their own separate procedures.

1.4 Delegation of Authority

This document is the responsibility of Code CI and is issued under the signature of the authority of the Configuration Control Board (CCB).

2.0 POLICY

The following defines the policy established by Code CI for the work control process. This policy will apply to all services within its scope (paragraph 1.3) that are provided by Code CI and its contractors to all elements of NASA Headquarters. These policy items are intended to provide overall guidelines for controlling work.

- Code CI will use an integrated work control process to record, track and maintain status on all of its customer work functions. This process will be responsive to the needs of the customer.

- The user interface to the work control process will be kept as simple and consistent as possible, with minimal paperwork to be completed by the customer.

- Routine services will be requested directly by the customer via a call to the Service Center. The Service Center will forward the request to the implementing organization via an automated work control system. These services are defined as Call-In Services.

- A single, common form will be used to document service requests. Specialized attachments are permitted when specific information is required. *See Appendix 3 for further information.*

- Appropriate approval is required on service requests. Services limited to an individual organization will be approved by the Code POC or their designee. If the POC chooses to delegate the responsibility to authorize SRs the delegation will be provided to Code CI in writing by the point of contact. Services affecting more than one code will be approved by a Code CI representative. *See Appendix 3 for further information.*

- Service Requests will be categorized into 2 SR categories: Class 1 and Class 2. Class 1 SRs are typically requests that substantially affect form, fit, or function for a significant number of customers. Class 1 SRs will require further review approval by the CCB. The CCB process will ensure that operational systems will not be adversely impacted by system changes and that the impact of the changes on the overall NASA Headquarters information processing environment are well understood.

- A comprehensive, automated work control system will be used to capture, track, and provide status and metrics on the work that is under the scope of this procedure

- The work control process will provide a method for continuous customer feedback with respect to requirements definition, proposed solutions, schedules, costs, status of the work performed and satisfaction with the work performed/services received.

- Service Center support hours are established in contract(s) between Code CI and its contractor(s). Continuous on-call support will be provided for designated systems and services in accordance with Service Level Agreements established with each Code. Arrangements for extended support hours will be provided based on high priority needs of the customers.

- Performance metrics will be established in accordance with the contractor metrics programs and reported to Code CI personnel and customers. The metrics program will establish schedule and performance targets and acceptable variances on the scheduled completion of the proposed work. These metrics will apply to services under the scope of this procedure.

3.0 PROCEDURES

The work control process defines the method Code CI delivers IT services to its customers. The work control process provides customer status, management control, work flow definition, prioritization and reporting of information on services, problems, and consultations. Performance of the overall service process is reflected in the appropriate service metrics and customer feedback responses.

As shown in Figure 3.1, the work control process is divided into three areas: Problems, Consultations and Services. Each area requires a specific form and level of service be provided.

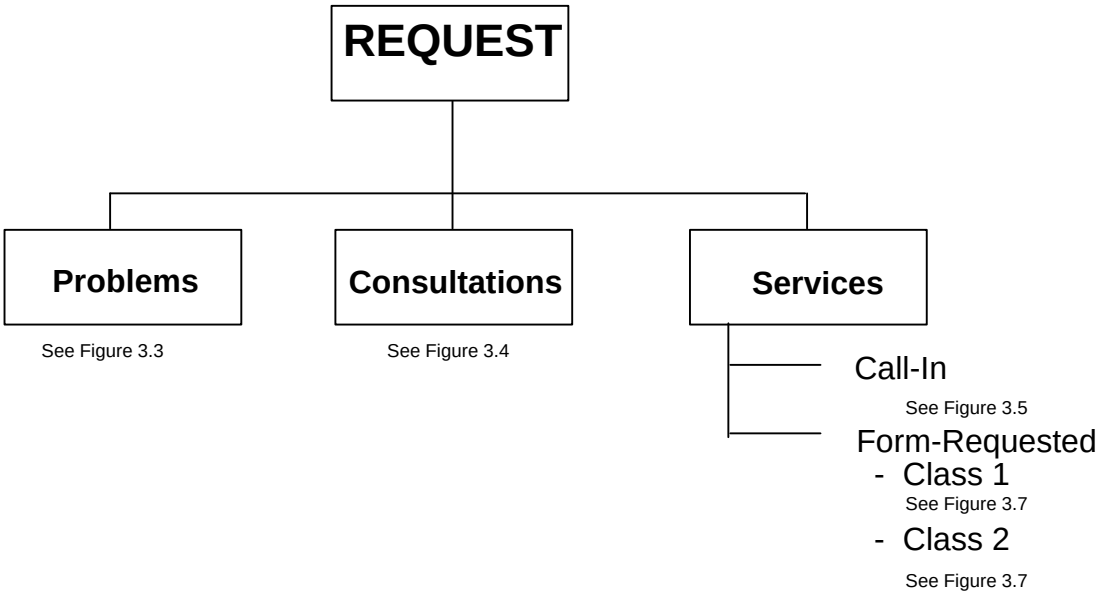


Figure 3.1. Work Control Process Work Categories

Definitions for each of these areas are:

- Problems - Existing capability, or services not performing their intended purpose.

- Consultations - The customer seeks advice or information in order to perform a desired function. Assistance is provided to the customer and the customer performs the function with assistance from the consultant.

- Call-In Services - Services rendered after a customer contacts the Service Center. No additional approvals are required in most cases.

- Form-Requested Services - Services rendered after the customer (or a representative for the requesting customer) completes the SR form. These services are any services not covered by the other services defined above. Appropriate Approvals are normally required.

As shown in Figure 3.2, Overall Service Request Process Flow, the customer contacts the Service Center identifying the type of service required. This contact may be either by telephone, e-mail, web-based request, walk-in, or SR form. Problems, Consultations, Call-In Services and Class 2 Form-Requested Services are routed directly to the implementing organization for action. Class 1 Form-Requested Services require additional consideration and will follow a different route.

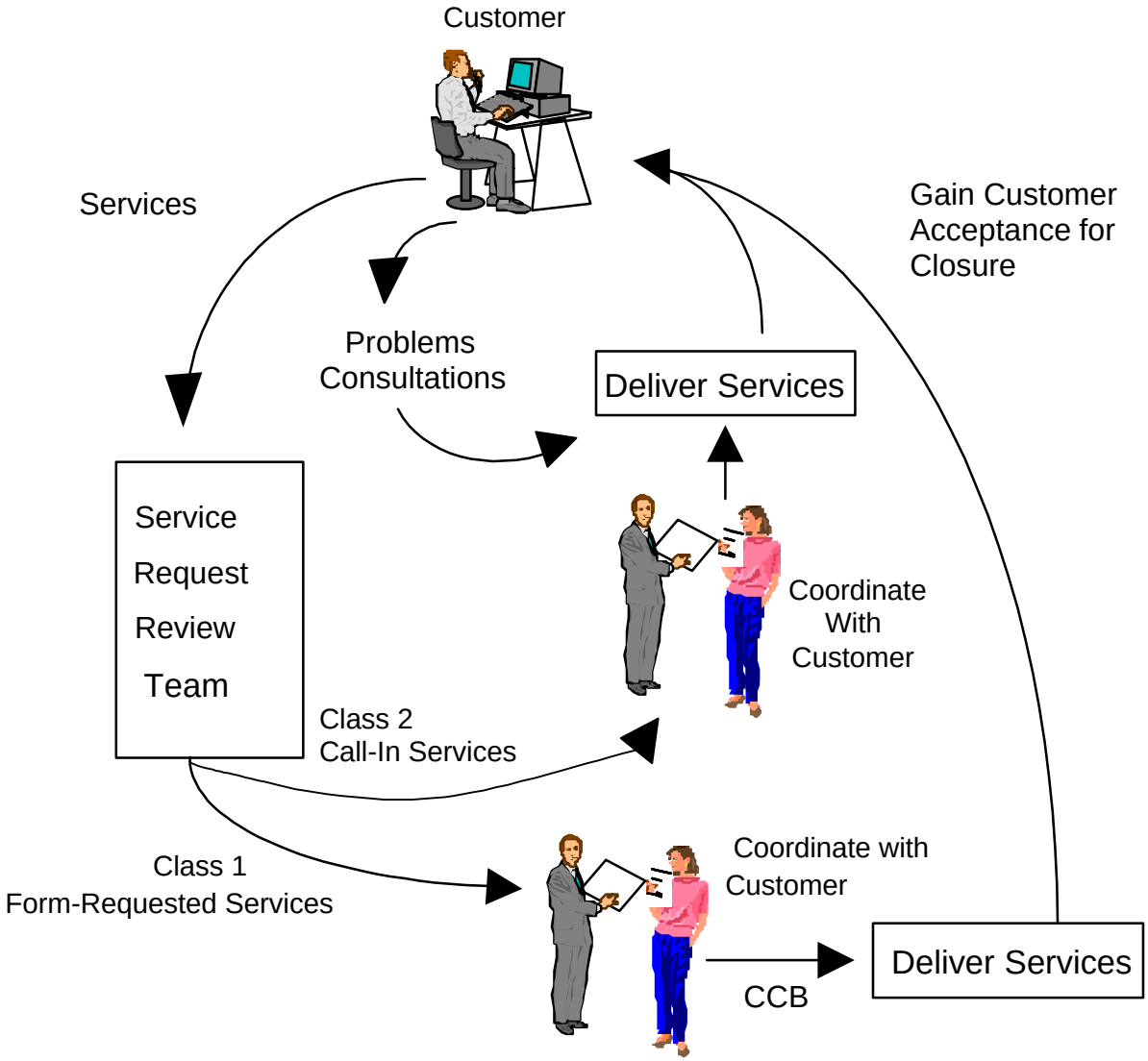


Figure 3.2. Service Request Process Flow

	when responded to does not lock the workstation and allows the user to continue working.

Table 3.1 Problem Report

Priorities for customer requests for service are assigned by the Service Center through consultation with the customer and appropriate contractor or Code CI personnel as are required. The Table in Appendix 2 will provide additional guidance in this priority assignment.

The process flow for problem reporting is shown in Figure 3.3. The Service Center receives the call, logs it into a work control system, and notifies the customer of the status of the PR. Whenever possible, the Service Center analyst resolves the problem during the first contact with the customer. If the problem cannot be resolved over the phone the Service Center analyst dispatches the PR to the appropriate team. All corrective action progress is updated in a work control system. The Service Center will coordinate the transfer of problem ticket information to another contractor as required and will follow-up to gather status as necessary for tracking purposes. For example, problem tickets may be dispatched to the MSFC Service Center, the IFMS Help Desk, vendors, or other contractors. When the trouble has been corrected, the customer is contacted for closure concurrence.

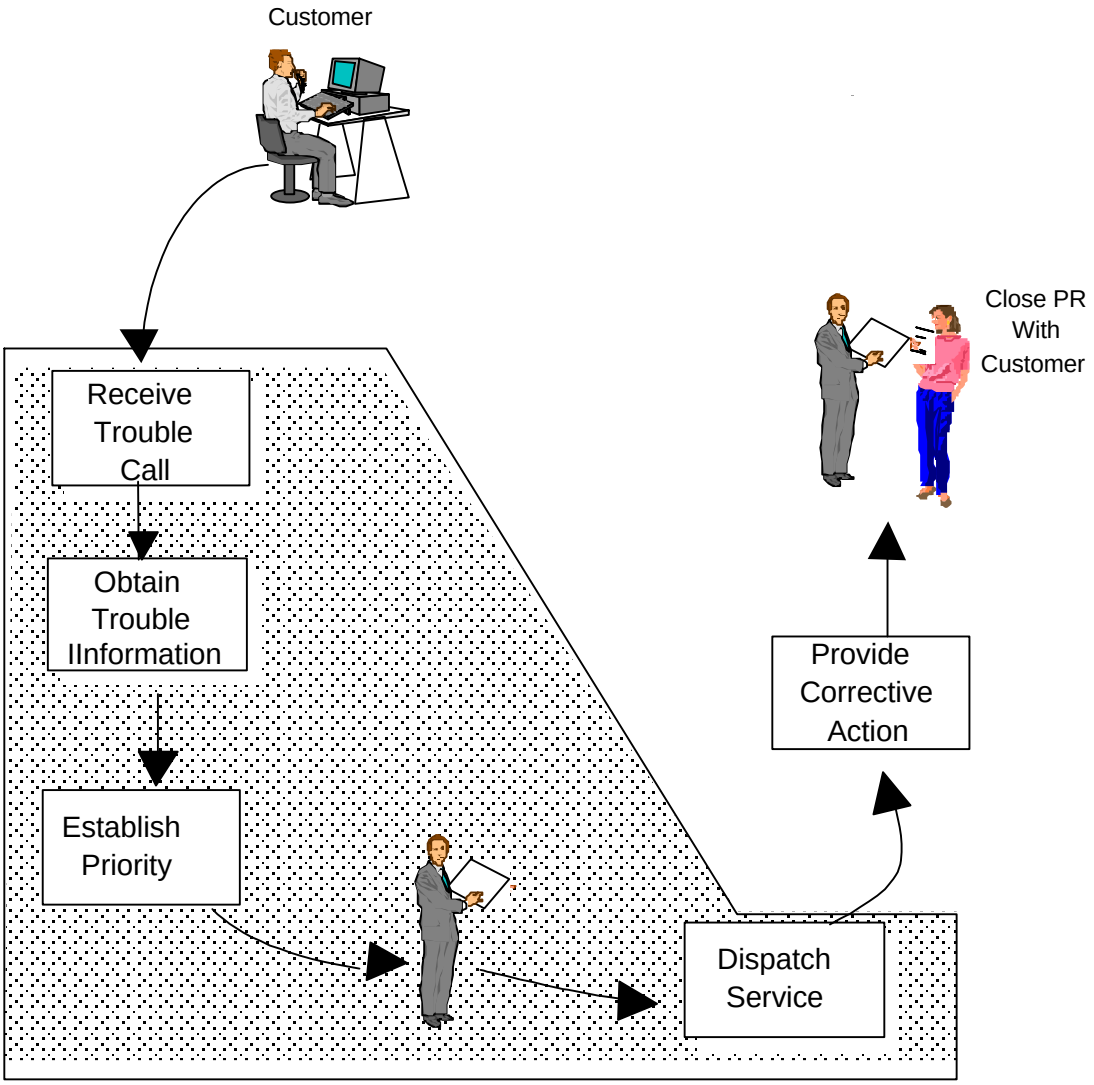


Figure 3.3. Problem Report Process Flow

3.2 Consultations

Consultations are requests for information or assistance to perform a specific function. Consultations may be requested in several different ways:

- Calls to the Service Center.
- The customer walks into the User Resource Center.
- E-mail requests to the Service Center.
- Web-based form to the Service Center.

Examples of consultations are product research, scanning assistance, file conversion, file transfers, individualized special training or instruction for preparation of presentations using available tools. The analyst providing the assistance will log consultations into the work control system. If the consultation requires more than four work hours, or Service Center estimates the consultation will exceed four hours, the Service Center will classify the request as a Call-In Service. The work will then be scheduled with the customer for completion and closure.

3.3 Services

Services are requests that require:

- New implementations
- Extended consultations
- Changes to existing service that impact form, fit, or function of the service
- Acquisition or other funding

To request a service, the customer may

- Call the Service Center for services defined in Appendix 3 as “Call-In Services”; or,
- Complete the SR form (Appendix 1) for Form-Requested Services. The overall SR process for this class of work is divided into three parts:
    - Preparing the SR form
    - Obtaining the appropriate NASA approval and funding
    - Performing the requested service

When the service is completed, the requestor is notified that the service delivery is complete. The customer determines if the service has been provided to his satisfaction. Closure of the SR is coordinated wih the customer.

3.3.1 Call-in Services

A services specified as a “Call-In” can be requested by the customer directly by calling or sending an electronic mail message or web-based form to the Service Center. Delivery of this service type will not require completion of a SR form or additional approvals by the CCB. The services classified as “Call-In” are listed in Appendix 3.

The Service Center logs the request into a work control system and forwards it to the implementing organization. No additional approvals by the CCB will be required prior to scheduling the work for implementation. The appropriate contractor will be notified of the SR, its schedule and status through a work control system. The contractor will establish an estimated completion date as defined in the contract’s SOW, for the submitted SR and coordinate this date with the customer. The SR will be dispatched as scheduled within a work control system and the service delivered within the estimated completion date.

3.3.2 Form-Requested Services

For those services that require the completion of the SR form, the process requires additional steps to obtain the appropriate approvals, funding, project definition, and final delivery. This applies to all services that have not been previously defined above. The overall process flow is shown in Figure 3.4.

NASA Approval Process. Approvals must be obtained from either (1) the Code Point of Contact (POC) for Code specific items, (2) by the Code CI representative, if items are non-Code specific, or (3) by the application Office of Primary Responsibility (OPR) for application SR’s. The Code POC/CI representative/application OPR have the responsibility to ensure that the request is valid and is consistent with a NASA service level agreement and with the policies and standards of the Headquarters and/or customer’s Code. The Service Manager and contractor may assist the customer in preparing the SR and in obtaining the required approvals. A list of the Code ADP/T Points-of-Contact, Code CI Service Managers, and IT Board of Directors members for each code is regularly updated.

Class Assignment. To expedite SRs to the deployment stage and to ensure that those that require modification to existing services or new services are properly handled, the appropriate individual (POC/Service Manager) will assign a class to each SR. During this class assignment step, the reviewing individual has authority to disapprove the SR and return the SR to the requestor. Class definitions are shown in Table 3.2.

Once the assignment has been determined, the SR is forwarded to a work control team where the contractor project leads are assigned and reviewed within the work control

process. If during the review of the SR, the class assignment may be reclassified as appropriate.

Class 1	Services that • Affect form, fit, or function of an operational baseline for a significant number of users • Require extensive cross-organizational coordination • Require purchase of items for which funds are not currently allocated within the budget
Class 2	Services that • Do not affect form, fit, or function of an operational baseline for a significant number of users • Require purchases of items within the standard product suite for which funds are budgeted • Do not require extensive cross organizational coordination, or do require cross-organization coordination using only well-defined processes. • Install products from the standard hardware and software suite for over 5 users • Relocate over 5 desktop systems • Develop HQ IT contract subtasks • Require miscellaneous supplies which are budgeted (e.g., disks, tapes, ribbons)

Table 3.2. SR Classification Definitions

Class 2 SRs will go directly to implementation without further approvals required from the CCB. The contractor must coordinate with the customer and, within the timeframe defined in the SOW, set a completion date for the Class 2 SR. The status of the SR will be maintained in a work control system and when the service delivery is complete, the contractor will review the service with the customer and obtain the customer's concurrence using a standard methodology to close the SR.

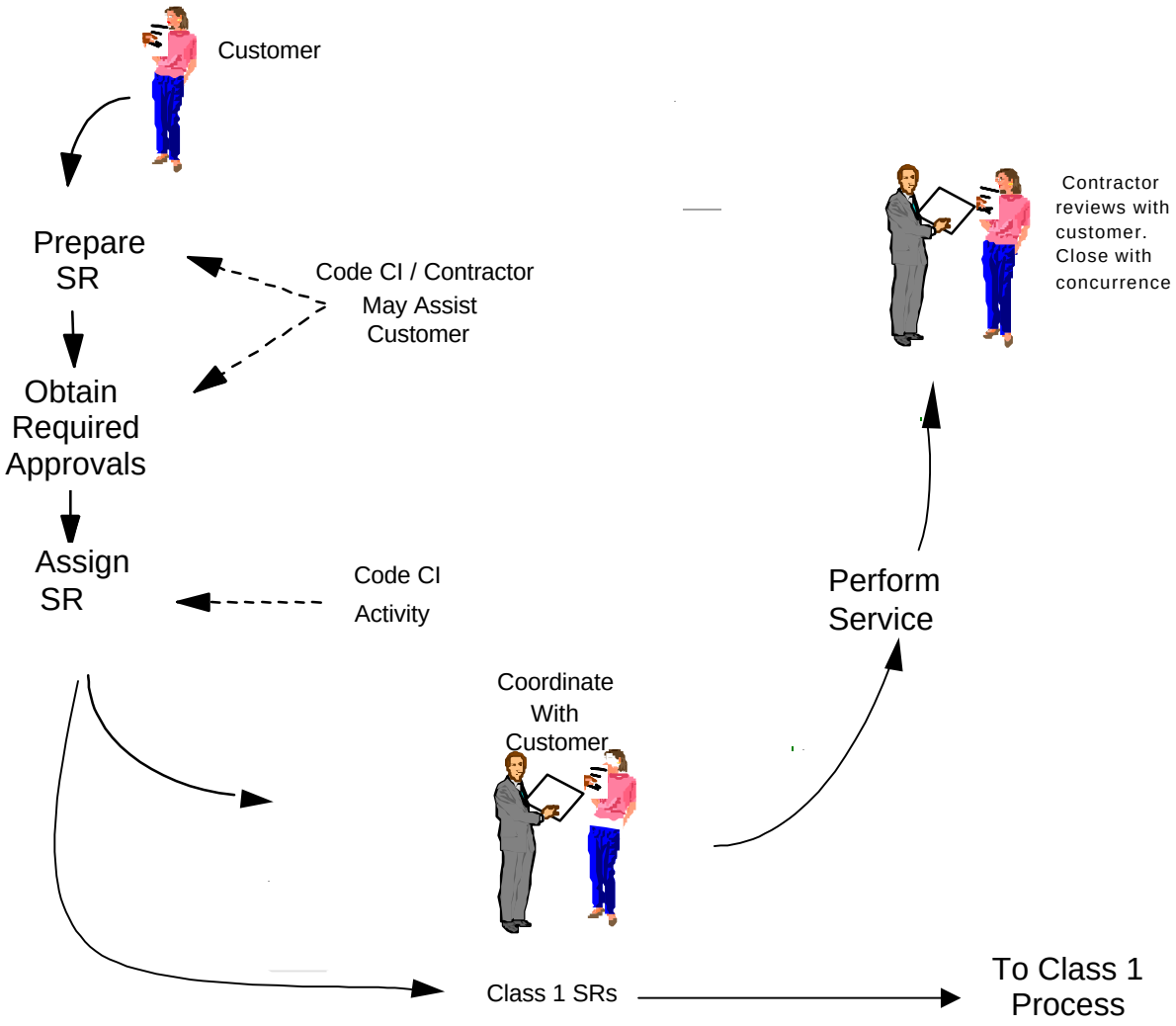


Figure 3.4. Form-Requested Services Process

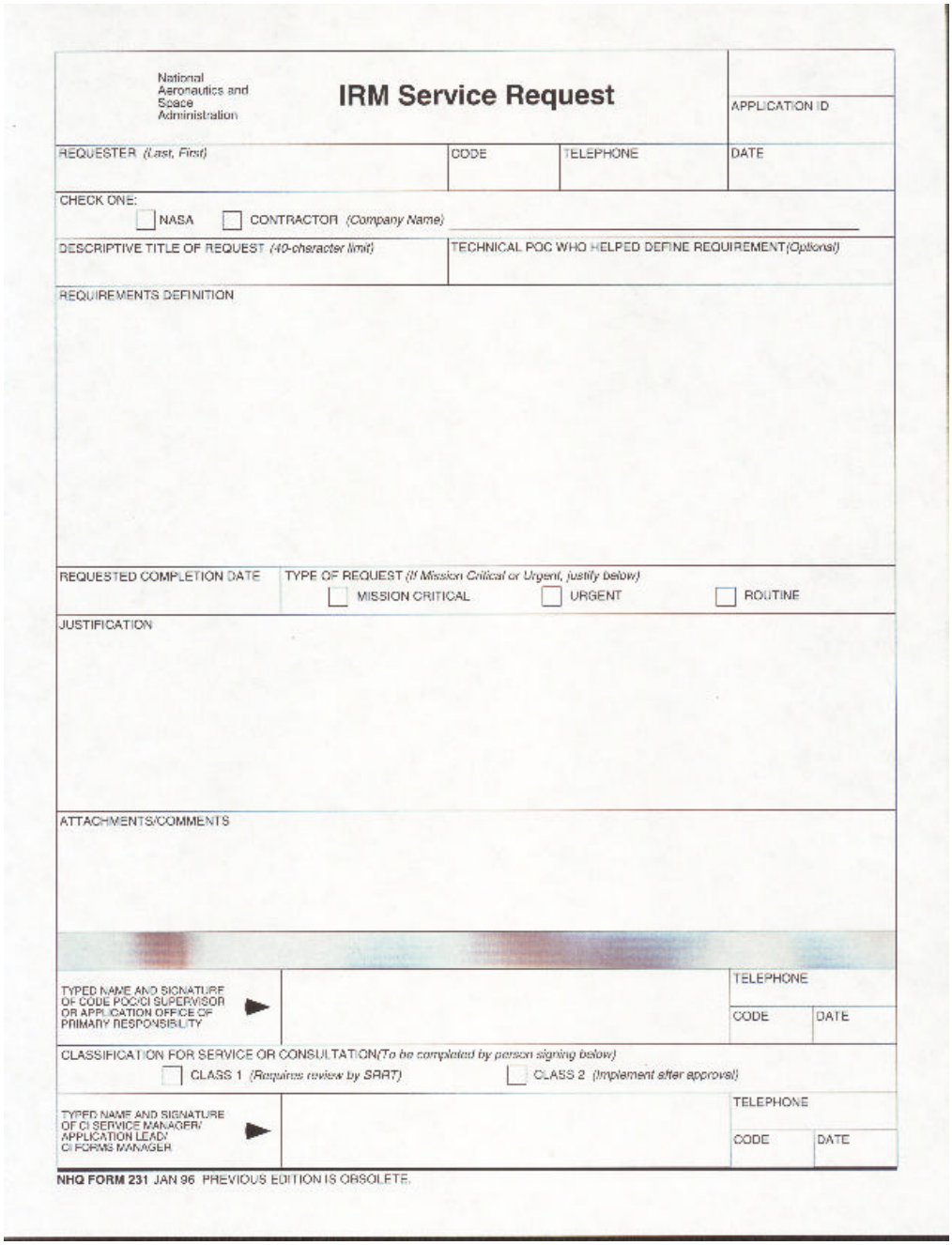
Once submitted to the contractor Class 1 SRs follow a different implementation process. After coordination with the customer, the contractor will establish a date that the SR is to be presented to the CCB. The CCB reviews the SR ensuring that (a) the impact to existing systems is fully understood, (b) a formal project plan and schedule is presented, (c) the customer agrees to the solution and the schedule, and (d) funding is available. Upon approval by the CCB the SR status is kept current in the work control system and coordination with the customer will be ensured at all phases of the SR.

Appendix 1

Service Request Form

Service Request Instructions

Service Request Form



National Aeronautics and Space Administration

IRM Service Request

APPLICATION ID

REQUESTER *(Last, First)* | CODE | TELEPHONE | DATE

CHECK ONE: ☐ NASA ☐ CONTRACTOR *(Company Name)* _____

DESCRIPTIVE TITLE OF REQUEST *(40-character limit)* | TECHNICAL POC WHO HELPED DEFINE REQUIREMENT *(Optional)*

REQUIREMENTS DEFINITION

REQUESTED COMPLETION DATE | TYPE OF REQUEST *(If Mission Critical or Urgent, justify below)* ☐ MISSION CRITICAL ☐ URGENT ☐ ROUTINE

JUSTIFICATION

ATTACHMENTS/COMMENTS

TYPED NAME AND SIGNATURE OF CODE POC/CI SUPERVISOR OR APPLICATION OFFICE OF PRIMARY RESPONSIBILITY ▶ | TELEPHONE | CODE | DATE

CLASSIFICATION FOR SERVICE OR CONSULTATION *(To be completed by person signing below)* ☐ CLASS 1 *(Requires review by SRRT)* ☐ CLASS 2 *(Implement after approval)*

TYPED NAME AND SIGNATURE OF CI SERVICE MANAGER/ APPLICATION LEAD/ CI FORMS MANAGER ▶ | TELEPHONE | CODE | DATE

NHQ FORM 231 JAN 96 PREVIOUS EDITION IS OBSOLETE.

Service Request Form Instructions

1. "**System ID**" - Leave blank. This number is assigned by the automated tracking system.

2. "**Application ID**" - Enter appropriate Application acronym (Example: FAST, HATS, etc.)
3. "**Requester**"- Enter your last name followed by first name.

4. "**Code**"- Enter your Headquarters Code here (example Code CI).

5. "**Telephone**" - Enter your telephone number here.

6. "**Date**" - Print or type the date you are completing the form. If completing the form on-line, system defaults with current date in block.

7. "**NASA" or "Contractor**"- Check "NASA" if you are a NASA civil servant. Check "Contractor" if you are a contractor working for NASA. If you check "Contractor,"

8. "**Company Name**" - Leave blank if you are a NASA Headquarters employee. If you list company name.

9. "**Descriptive Title of Request**" – Provide a brief title for your request.

10. "**Technical POC**" – Name of technical point-of-contact working with you on request, if applicable.

11. "**Requirements Definition**" – Provide a detailed description of what you need.

12. "**Requested Completion Date (MM/DD/YYYY)"** - Enter the date you require the requested service to be completed (Example: 25-Feb-1998 for February 25, 1998).

13. "**Mission Critical**", "**Urgent**", "**Routine**" - Check one block to identify the criticality of your request. Please note that if you check "Mission Critical" or "Urgent," you must justify the criticality in the "Justification" block. Refer to the following definitions to choose an appropriate block:

    - Mission Critical = The service is critical to the accomplishment of NASA's mission. There are no other alternatives available. Please note that you may have a desired date several months in the future but still check "Mission Critical."

    - Urgent = An important, pressing requirement for this service and it may be accomplished as part of the normal daily work process.

- Routine = There is not a pressing requirement for this service and it may be accomplished as part of the normal daily work process.

14. "**Justification**" – Provide a brief statement justifying the need for the service.

15. "**Attachments/Comments**" – Please list any attachments that are being forwarded with the IRM Service Request form.

16. **Approvals** - Code Point of Contact and Service Manager signatures and contact information. For current Point of Contacts list see:
    http://www.hq.nasa.gov/office/codec/codeci/help/pocs/genpocs.htm

17. "**Classification**" – To be determined by Code CI.

Appendix 2

Current IR&MS Contract Requirements for

Problem Report Response Time

Current IR&MS Contract Requirements forProblem Report Response Time

The response time targets for providing resolution to problem reports are shown in the table below. The customer should provide the Service Center with the information on the problem to permit proper classification of the problem and to determine the priority.

Customer Condition	Customer Category	Average Response Time	Maximum Time to First Response	95% Workaround Generation Time	95% Resolution Time
Cannot Continue Task (Problem)	Single Customer	2 Work Hours	4 Work Hours	8 Work Hours	3 Work Days
	Multiple Customer	1 Work Hour	2 Work Hours	4 Work Hours	3 Work Days
	Critical Project	30 Minutes	2 Work Hours	2 Work Hours	2 Work Days
General Consultation	Single Customer; Multiple Customer; Critical Project	30 Minutes	4 Work Hours	N/A	8 Hours

Response time is defined as the time a qualified individual begins to work with the customer to address a reported problem.

The **work around generation** and **resolution time** begins when the customer first calls the problem to the attention of the Service Center and ends when the problem has a resolution in place.

"95% Workaround Generation Time" means that, for 95% of the problems reported, a workaround will be developed on the customer's equipment within the specified time.

"95% Resolution Time" means that for 95% of the problems/questions reported a resolution will be generated and implemented on the customer's equipment (or for questions, an answer provided), within the specified time.

Appendix 3

Problems

Consultations

Call-In Services

Form-Requested Services

Problems

Problems reflect failures in established services. They may be categorized as equipment, software or documentation error. The customer should provide all the information available when reporting the problem to ensure that it is properly processed.

Examples include:

- Application fails to perform function as designed
- Poor performance
- Cannot read from disk, print, access network, or boot machine
- Voice mail system not answering phone
- Error message received
- Equipment requires cleaning
- E-mail not received
- Calendar cannot be accessed

Consultations

Consultations result when a customer seeks advice or information in order to perform a desired function. Assistance is provided to the customer and the customer performs the function.

Examples include:

- Help with a "PowerPoint" presentation
- Help to convert between file formats, transferring files, or document scanning
- User Resource Center services (scanning, printing, clip art, etc.)
- Assistance in utilizing a product/application to meet a specific need
- Help in setting up an extended absence greeting on Voice Mail
- Help in setting up "Microsoft Word" to print labels
- Individualized special training/informal demonstrations

Call-In Services

Call-In Services are services that will be rendered when the customer calls the Service Center or sends an e-mail. No additional approvals are required from the CCB/SRRT. The list of currently provided Call-In Services is provided below. Only these services will be provided on a call-in basis. This list will be modified as services are determined to be Call-In Services.

The Call-In Services are:

- Hardware and software installation of available items (five items or less);
- Connectivity/drop activation;
- Relocations of five persons or less;
- LAN ID/password administration and mainframe password resets;
- Site surveys for installing desktop systems (five systems or less);
- ADP/T equipment loaners including laptops;
- Requests for new Voice Mail service or change to current service;
- ADP/T equipment set-up in conference rooms;
- ADP/T write-ups for publications;
- CATV outlet relocations;
- Consultations of more than four hours in duration;
- Requests for software available for home use, concurrent use, or via call-in services.

Form-Requested Services

Form-Requested Services are services that will be rendered after the customer completes a Service Request form (NHQ Form 231). Depending on the service requested, the request will be classified as Class 1 or Class 2. Class 2 services may be implemented without any additional approvals obtained by the customer. Class 1 services must be more formally defined and follow a project-oriented process. The class assignment may be discussed with the appropriate Service Manager should there be any questions. Examples of these services are shown in Table A.1 below:

Class 1	Services that • Affect form, fit, or function of an operational baseline for a significant number of users • Require extensive cross-organizational coordination • Require purchase of items for which funds are not currently allocated within the budget
Class 2	Services that • Do not affect form, fit, or function of an operational baseline for a significant number of users • Require purchases of items within the standard product suite for which funds are budgeted • Do not require extensive cross organizational coordination, or do require cross-organization coordination using only well-defined processes. • Install products from the standard hardware and software suite for over 5 users • Relocate over 5 desktop systems • Develop HQ IT contract subtasks • Require miscellaneous supplies which are budgeted (e.g., disks, tapes, ribbons)

Appendix 4

SRRT Charter

1.0 SERVICE REQUEST REVIEW TEAM

The Service Request Review Team (SRRT) is established for the review and disposition of service requests submitted by NASA HQ customers. The goal of the SRRT is to provide the most customer-responsive service possible, consistent with Federal Acquisition Regulations (FAR), accepted Information Resources Management (IRM) practices, NASA Headquarters policies, strategies, and budget.

2.0 MEMBERSHIP

The SRRT Team has the same membership as the CCB. Membership is described for the CCB by the CCB Operations Procedure. Designated functions within Code CI are represented, as well as contractor representatives for the corresponding functions within each contractor's contract Statement of Work.

Appendix 5

Configuration Control Board (CCB)

Configuration Control Board (CCB)

The Configuration Control Board (CCB) is an open forum chaired by a NASA Headquarters member as appointed by the Contracting Officer Technical Representative. The permanent members of the CCB are comprised of select Code CI Civil Servants and IT service providers representing the major functional areas.

Other attendees to the CCB may include both NASA and contractor personnel.

CCB schedules weekly meetings to disposition SRs that request changes to the form, fit, or function of the configuration baseline and to conduct Operational Readiness Reviews (ORRs). Changes are submitted to the CCB for approval/disapproval determination.

Out of board approvals can be obtained for emergency situations and critical tasks that cannot wait for the normal CCB approval cycle.

IR&MS CCB OPERATIONS PROCEDURES

The purpose of this procedure is to define a consistent set of configuration management processes for initiating project development; establishing project baselines; controlling changes and acquisitions to the baseline; approving deployments; and managing contract deliverables.

OVERALL PROCESS DEFINITION –

1. A Change Request (SR) will be used to propose a change in the baseline. The CR can establish IR&MS baseline items; propose hardware, communications or software changes; or request the formal approval or change of documentation.

   CRs can occur in two forms (1) standard and (2) emergency. Standard CRs are those that can be processed in the normal review/development/deployment cycle with adequate lead times for each. Emergency CRs are those that arise due to problem reports or other external factors that require immediate attention. The standard CRs follow the cycle described in Figure IV.C. The emergency CR follows the path shown in Figure IV.C.2. Emergency changes due to PRs follow the process as shown in Figure IV.C.3.

   The general flow for standard CRs through the SRRT, development and CCB process is shown in Figure IV.C. Alternate flows for emergency requests and problem reports are shown in Figures IV.C.2 & IV.C.3. Any IR&MS member may originate a standard CR by issuing a Service Request (SR) through the normal work control process. The SR will be reviewed by the SRRT and should there be changes proposed to production systems function, form, or fit, it is identified as an action for the CCB. Once identified as an action for the CCB, the CCB development package is prepared and presented to the CCB. Once approved, development will begin. When ready for deployment, the Operational Readiness Review will be conducted by the CCB; when approved, deployment will follow.

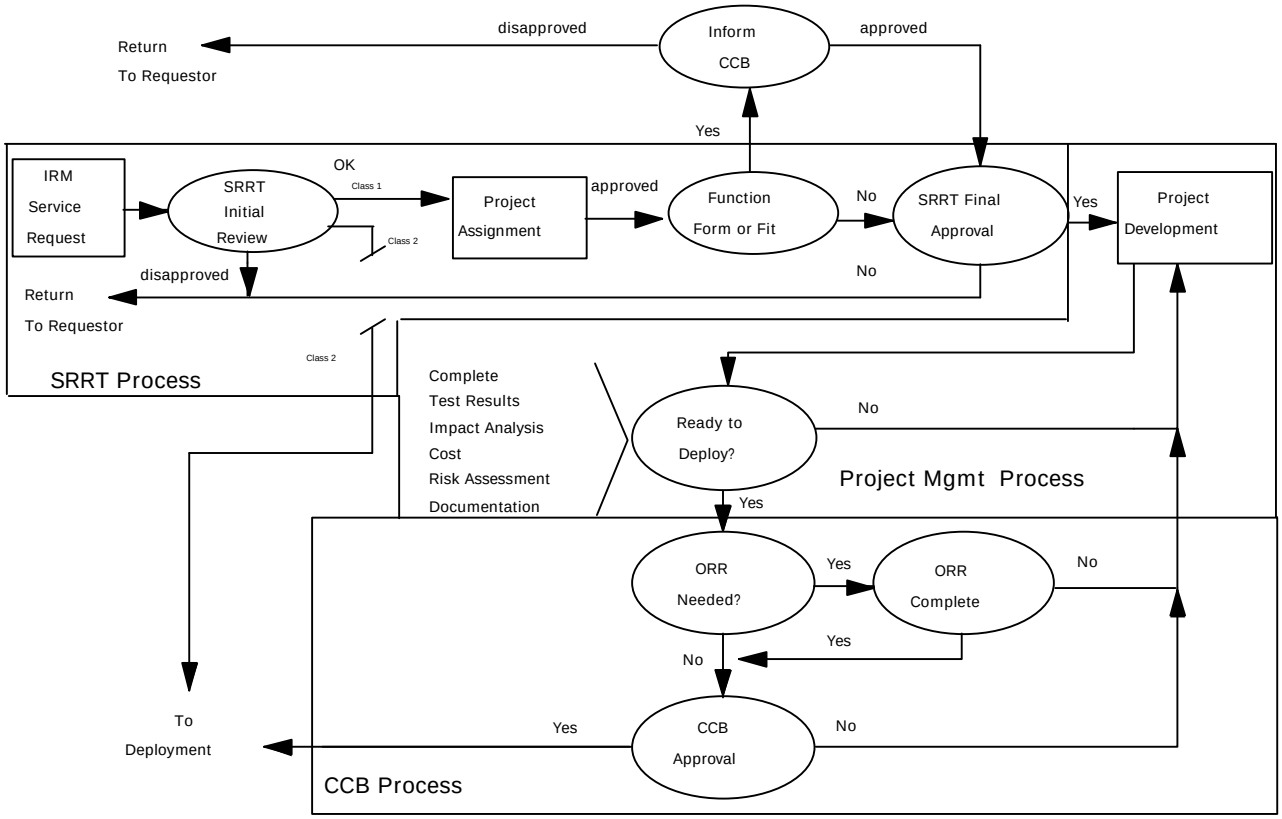


Figure IV.C Overall Configuration Management Process Flow

a. CCB SUBMISSION FOR DEVELOPMENT APPROVAL - The CCB Development Package will be presented at a regularly scheduled CCB/SRRT meeting. The request for presentation shall be scheduled through Work Control and the Development Package shall be available to the CCB secretary 48 hours in advance of the meeting. Work Control will include the item on the CCB agenda to be distributed to CCB members 24 hours in advance of the meeting The CCB will review the Development Package, and decide if the project should be initiated. If approved, development is initiated; otherwise it is returned to the project sponsor.

b. OPERATIONAL READINESS REVIEW/DEPLOYMENT APPROVAL - Upon completion of the project, the project sponsor will schedule 48 hours in advance through Work Control an ORR and prepare the CCB Deployment Package.

The project sponsor will present the ORR to the CCB. The ORR presentation should include an overview of the project, schedule, test plan, test results, customer approval, risks, unfinished items, implementation and backout plans.

During the ORR, the members of the CCB will review their items of responsibility. Based on this review, the CCB chairperson will disposition the CR with any actions and make any changes necessary to the CR. Should it be approved the CCB chairperson will sign and date the CR approving project deployment.

2. EMERGENCY CHANGE REQUESTS - The Emergency CR follows a similar path as that for the Standard CR. It is not however, necessary to wait for the normal weekly CCB meeting to process the Emergency CR. As shown in Figure IV.C.2, the CR sponsor will "walk" the CR through the process described for the Standard Change. Figure IV.C.1 shows those forms that are required for the "walk through" position of the sign-off. Other materials that are available before the deployment package may be included but are not required. The signed CR will be forwarded by the CR sponsor to CM and Work Control. The complete deployment package (see Figure IV.C.1) shall be prepared and forwarded to CM. CM will include the Emergency CR on the next regular CCB agenda allowing the complete CCB to be informed on emergency actions. This will complete the formal action.

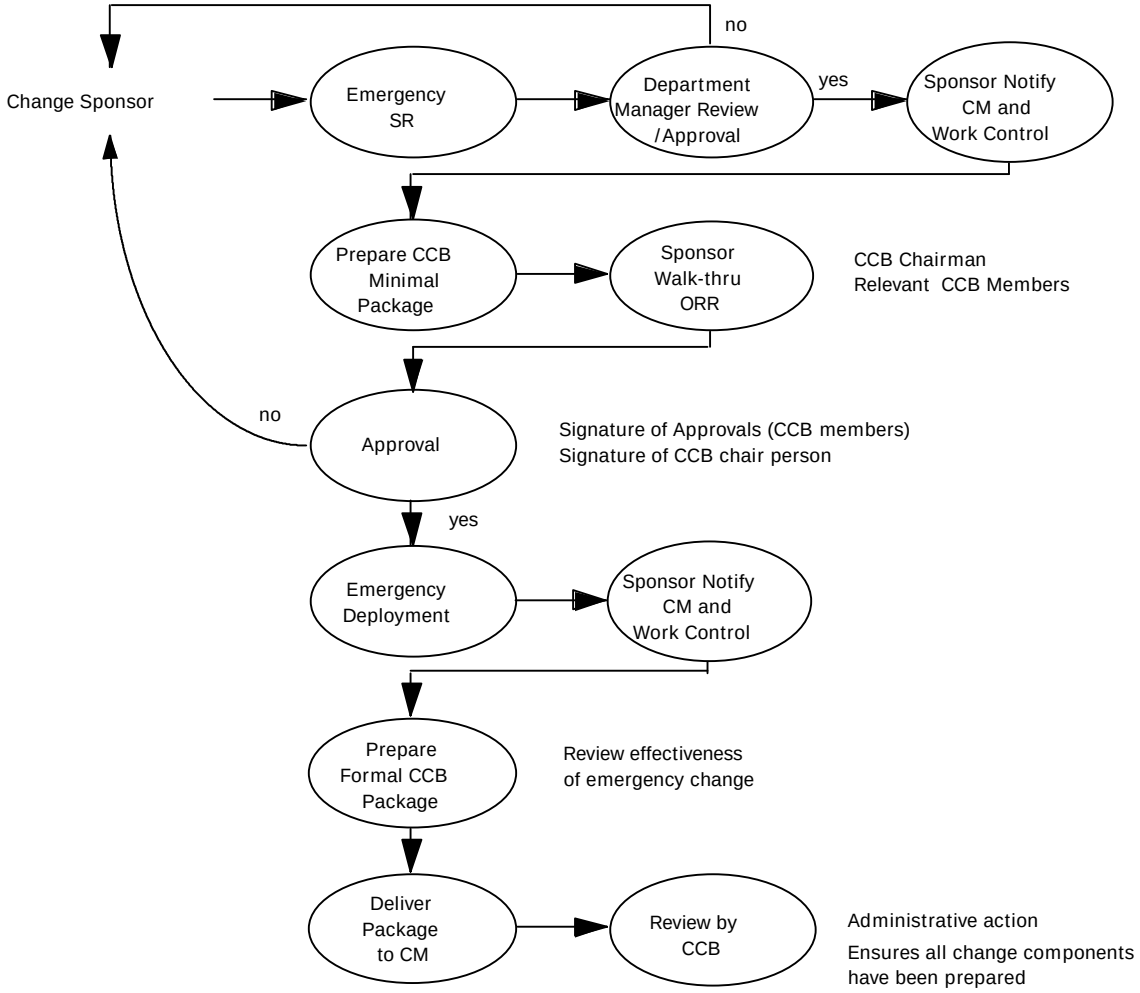


Figure IV.C.2 Emergency CCB Process

3. PROBLEM REPORT CHANGE REQUESTS **-** The PR CR also follows an accelerated path. As problems are submitted to Work Control they will be assigned to a responsible manager.

   There are two possible paths that can be followed. Should a PR correct a problem in a previously approved CID, no CCB action is required. The ORR package is developed and walked through the approved process as shown in Path A in Figure IV.C.3. Only approval of affected elements are required. These will be included on the CR form.

   PRs that will impact function, form, or fit will require CCB action. This shown in Path B of Figure IV.C.3. In this case, approval by the CCB Chairperson is required.

All Standard Change elements are still required including the ORR. Completed PR changes will be included on the next regular CCB agenda allowing the complete CCB to be informed on emergency actions. This will complete the formal action.

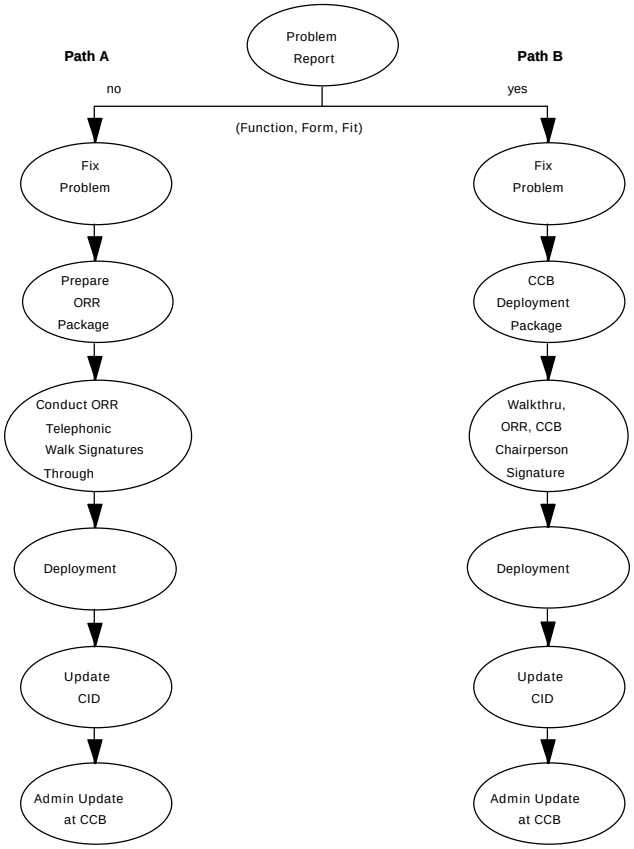


Figure IV.C.3 Problem Report Process Flow